

# **ABSTRACT OF THE DISCLOSURE**

In a semiconductor manufacturing process such as the CMP process with the large ratio of manual work, the automation is promoted in order to achieve the rationalization and the manpower reduction, the improvement of the processing ability, the reduction of the investment amount, and the improvement of the indirect operation efficiency. By just downloading the process recipe of the product wafer from the host computer to the CMP apparatus in the CMP process, the dummy wafer is processed under the predetermined process condition before processing the product wafer. In this manner, the unmanned operation can be achieved. In addition, the measurement data of the film thickness measuring device mounted to the unmanned CMP apparatus is transmitted together with such process data as the polishing time from the CMP apparatus to the host computer. By doing so, the recipe condition of the CMP apparatus can be changed based on the latest data, and the process condition of the subsequent process is used in the feedforward manner based on the film thickness measurement data. In this manner, it is possible to eliminate the measurement process in the subsequent process.